

### **ABSTRACT OF THE DISCLOSURE**

An optical carrier notch filter includes an optical coupler with at least first, second and third ports. The first port is configured to receive an output that includes an optical carrier and interleaved optical single sideband signals. An optical bandpass filter is coupled to a port of the optical coupler. The optical bandpass filter separates the output into a transmitted signal that contains the optical carrier, and a reflected signal that includes the interleaved optical single sideband signals. The reflected signal is reflected from the optical bandpass filter to the third port of the optical coupler.

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